

Asst. Prof. İSMAİL DURGUT

Personal Information

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Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, Turkey 1994 - 1998

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, Turkey 1990 - 1993

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, Turkey 1984 - 1990

Dissertations

Doctorate, A STUDY ON OPTIMAL CONTROL AND ON-LINE OBSERVATION OF GAS PIPELINES, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, 1998

Postgraduate, NON ISOTHERMAL STEADY STATE FLOW OF NATURAL GAS IN TRANSMISSION AND DISTRIBUTION SYSTEMS, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, 1993

Research Areas

Reservoir Engineering and Recovery Methods, Gas Hydrates, Jeothermal Reservoir Engineering, Pipelining, Underground Storage, Ecology and Pollution, Gas Production from Gas Hydrate Reserves

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Petroleum and Natural Gas Engineering, 2013 - 2018

Advising Theses

DURGUT İ., Design and evaluation of wellbore strengthening materials for fractured reservoirs, Postgraduate, U.Gargılı(Student), 2019

DURGUT İ., Development of a screening model for polymer flooding in multi-layer reservoirs, Postgraduate, N.ZAREPAKZAD(Student), 2018

DURGUT İ., Random walk particle modelling of polymer injection using MATLAB reservoir simulation toolbox, Postgraduate, G.MAMAK(Student), 2017

DURGUT İ., Behavior of pollutants percolation in homogeneous porous media, Postgraduate, S.SEPEHRI(Student), 2016

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A comparative analysis and rapid performance prediction of polymer flooding process by coupling reservoir simulation with neural networks**
Zarepakzad N., Artun E., DURGUT İ.
International Journal of Oil, Gas and Coal Technology, vol.27, no.3, pp.227-246, 2021 (Journal Indexed in SCI)
- II. **Extending Voronoi-diagram based modeling of oil slick spreading to surface tension-viscous spreading regime**
DURGUT İ., ERDOĞAN M., Reed M.
MARINE POLLUTION BULLETIN, vol.160, 2020 (Journal Indexed in SCI)
- III. **Random walk particle-tracking method for modeling changes of sediment characteristics in marine sediments after drilling discharges**
ÖZDEMİR R. T. , DURGUT İ., Reed M.
MARINE POLLUTION BULLETIN, vol.145, pp.224-238, 2019 (Journal Indexed in SCI)
- IV. **Modeling spreading of oil slicks based on random walk methods and Voronoi diagrams**
DURGUT İ., Reed M.
MARINE POLLUTION BULLETIN, vol.118, pp.93-100, 2017 (Journal Indexed in SCI)
- V. **State estimation of transient flow in gas pipelines by a Kalman filter-based estimator**
DURGUT İ., LEBLEBİCİOĞLU M. K.
JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING, vol.35, pp.189-196, 2016 (Journal Indexed in SCI)
- VI. **Dynamic modeling of environmental risk associated with drilling discharges to marine sediments**
Durgut İ., Rye H., Reed M., Smit M. G. D. , Ditlevsen M. K.
MARINE POLLUTION BULLETIN, vol.99, pp.240-249, 2015 (Journal Indexed in SCI)
- VII. **Mathematical Modeling of the Soaking Period in a Microbial Enhanced Oil Recovery Application**
Durgut İ., Behlülçil A. K. , Mehmetoğlu M. T.
Energy Sources, vol.25, no.9, pp.871-877, 2003 (Journal Indexed in SCI Expanded)
- VIII. **The use of genetic algorithms for determining the transport parameters of core experiments**
Gumrah F., Durgut İ., Oz B., Yeten B.
IN SITU, vol.24, no.1, pp.21-56, 2000 (Journal Indexed in SCI)
- IX. **Kalman-filter-based observer design around optimal control policy for gas pipelines**
Durgut İ., Leblebicioglu K.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.24, no.2, pp.233-245, 1997 (Journal Indexed in SCI)
- X. **Optimal control of gas pipelines via infinite-dimensional analysis**
Durgut İ., Leblebicioglu K.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.22, no.9, pp.867-879, 1996 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Effect of Dispersion Coefficient on Polymer Injection Studied with Random Walk Particle Tracking Method**
Durgut İ., Mamak G.
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.10, no.1, pp.432-438, 2021 (National Refreed University Journal)
- II. **Investigating Use of Pressure Pulses to Assess Near Wellbore Reservoir Parameters**
Durgut İ.

Refereed Congress / Symposium Publications in Proceedings

I. Design and Development of Data-Driven Screening Tools for Enhanced Oil Recovery Processes

Yalçın G., Zarepakzad N., ARTUN F. E. , DURGUT İ., KÖK M. V.

SPE Western Regional Meeting, 22 - 26 April 2018

II. A numerical method for the gas production process in gas hydrate reservoirs

Durgut İ., Parlaktuna M.

2nd International Conference on Natural Gas Hydrates (NGH 96), Toulouse, France, 2 - 06 June 1996, pp.549-556

Citations

Total Citations (WOS):34

h-index (WOS):3